

Abstract

5 A primary object of this invention is to provide a method which will enable to coexpress simultaneously two (or more) desired genes in plant, animal or yeast cells, in transgenic plants and animals, or *in vitro*, in plant cell-derived or animal cell-derived translation systems. This objection is to be accomplished by utilizing sequence elements derived from RNAs of a tobamovirus upstream of MP gene or CP gene termed here as IRES_{MP} and IRES_{CP}, respectively. The method of this invention involves the construction of a recombinant nucleic acid sequence which comprises a specific transcriptional promoter, a 10 first gene expressible in eukaryotic cells linked to said transcriptional promoter, IRES_{MP} or IRES_{CP} located 3' to the first gene and a second gene expressible in eukaryotic cells, located 3' to IRES sequence such that the second gene is placed under the transcriptional control of IRES sequence originated from tobamovirus genome. The primary chimeric RNA transcript in positive sense polarity is produced by the transformed cells from the said 15 promoter. The expression of the first gene occurs by direct translation whereas the translation of the 5'-distal gene(s) of bicistronic (or polycistronic) mRNA will be promoted by IRES_{MP} or IRES_{CP}.

09911732.072501